

VOLUME 6 SURVEILLANCE**CHAPTER 2 PART 121, 135, AND 91 SUBPART K INSPECTIONS****Section 4 Ramp Inspections for Part 91 Subpart K Operators and Part 121 and 135 Air Carriers****6-231 PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) ACTIVITY CODES.**

A. Maintenance. 3627.

B. Avionics. 5627.

C. Operations. 1622.

6-232 OBJECTIVE. This section provides guidance for sampling the quality of maintenance and the degree of compliance with the operator/fractional program manager's (hereafter referred to as the program manager) maintenance procedures on in-service aircraft operated under Title 14 of the Code of Federal Regulations (14 CFR) part 91 (subpart K), and part 121, 125, 129 (§ 129.14), 133, 135, 137, 141, or 142.

6-233 GENERAL.

A. Inspector Training. It is important that aviation safety inspectors (ASI) become familiar with the type of aircraft to be inspected before performing the inspection. This can be accomplished by on-the-job training.

NOTE: Only ASIs who have received part 129 geographic inspector training or are permanently assigned to an International Field Office (IFO) may conduct foreign air carrier inspections.

B. Personnel Needed for Inspection.

1) Due to the hub and spoke concept, many aircraft have less than one hour ground time. To ensure that the inspection is performed adequately, the Federal Aviation Administration (FAA) recommends that two inspectors perform this task in exterior and interior phases.

NOTE: ASIs do not have to give part 129 operators advance notice that a ramp inspection will be conducted. However, inspection activities must be timed so they do not delay or interfere with passenger boarding or deplaning or impede aircraft service or catering. The captain, his or her representative, or an appropriate airline representative should also be present.

2) Due to the nature of fractional ownership operations, part 91, subpart K aircraft may have little of no ground time at any one location. As with on demand air carriers, these aircraft may be dispatched at short notice. It is important to coordinate with flightcrews, maintenance crews, and, where possible, dispatch personnel. To ensure that the inspection is

performed adequately, the FAA recommends that tow inspectors perform this task in exterior and interior phases.

NOTE: En route inspections are not allowed in these aircraft when they are operated under part 91 subpart K.

C. Coordination.

1) Airworthiness and Operations ASIs possess various degrees and types of expertise and experience. An ASI who needs additional information or guidance on a given subject should coordinate with personnel experienced in that particular specialty.

2) Geographic units may need to coordinate with the certificate-holding district office (CHDO) for domestic operations and the IFO for part 129 operations, as they do not always have access to the program manager's or air carrier maintenance procedures manual. In addition, when discrepancies are found, the geographic unit should communicate with the CHDO or the IFO.

D. Use of FAA ASI Credentials to Access Aircraft and Secure Areas of U.S.

Airports. Proper use of identification credentials, checkpoint procedures, and resolution of misunderstandings with airlines and other government agencies are crucial for the creation of an environment where ASIs can conduct effective inspections and surveillance. Both the FAA Flight Standards Service and the Transportation Security Administration (TSA) have reaffirmed the necessity of ASI access to Security Identification Display Areas (SIDA) and Airport Operations Areas (AOA). However, because of TSA's enhanced screening process and other airport security measures, ASIs must undergo extra steps when entering a SIDA. FAA Order 8000.38, Aviation Safety Inspector Credential Program, as amended, provides guidance and policy for the use of FAA Form 110A, Aviation Safety Inspector's Credential. ASIs should reference this order for specific guidance and policy on access to aircraft and secure areas of U.S. airports.

6-234 OBJECTIVES OF RAMP INSPECTIONS. The primary objective of a ramp inspection is to provide inspectors with the opportunity to evaluate an air carrier operation while the crewmembers and aircraft are on the ground. A ramp inspection is an effective method for evaluating an operator's ability to prepare both the aircraft and crew for a flight to be conducted. Also, when a ramp inspection is conducted after the completion of a flight, it is an effective method for determining whether the aircraft and crew were adequately prepared for the flight, as well as for evaluating the operator's postflight and/or turnaround procedures and crewmember and ground personnel compliance with these procedures. Ramp inspections allow inspectors to observe and evaluate the routine methods and procedures used by an operator's personnel during the period immediately before or after a flight, to determine compliance with regulations and safe operating practices.

6-235 INITIATION AND PLANNING.

A. This task is scheduled as part of the work program or special emphasis request. Additional inspections are initiated by national, regional, or district office special requirements.

B. The ramp inspection provides the ASI with an opportunity to ensure that the compliance dates and requirements of new Airworthiness Directives (AD) and regulatory revisions have been met. ADs, Service Difficulty Report Summaries, Maintenance/Airworthiness Bulletins, and PTRS entries should be reviewed, when available. (This is also applicable to U.S.-registered aircraft operated by foreign operators under § 129.14.)

6-236 MAINTENANCE RECORDS.

A. Regulations require maintenance to be recorded whenever it is performed prior to an approval for return to service. The operator/program manager's maintenance procedures manual should describe the procedures for ensuring that these recording requirements are met, including the specific instructions on when an airworthiness release or appropriate maintenance log entry is required.

B. Operators/air carriers/program managers must either correct or defer all mechanical discrepancies entered in the maintenance log using the methods identified in their maintenance procedures manual. Some Program managers may include these procedures in a separate maintenance procedures manual. Additionally, some fractional ownership program aircraft are also operated by part 121 or 135 operators. In such cases, maintenance procedures may be contained within the carriers' maintenance manual. As a variety of manuals are used, the FAA advises reviewing the appropriate manuals before performing the inspection.

C. Fractional ownership programs can select either an inspection program or a continuous maintenance program. Refer to the program manager's operating manual for the details of the program that they have selected. The inspection/maintenance program information will often be carried onboard the aircraft.

D. The Minimum Equipment List (MEL) has certain procedures and conditions that operators/air carriers/program managers must meet prior to deferring the item(s).

1) These procedures are identified by "O," "M," and "O/M" and are normally contained in the operator/program manager's FAA-approved MEL. Sometimes the MEL references these procedures to another document.

2) When reviewing the records for MEL compliance, the ASI must determine what procedures are required for deferral and ensure that these procedures are accomplished.

3) The ASI must ensure that all applicable repetitive MEL procedures are accomplished for those items that are deferred and are continuing to be deferred through the station. These repetitive maintenance procedures must be signed off in the maintenance log as evidence that the procedures were accomplished.

6-237 DEFERRED MAINTENANCE.

A. Minimum Equipment List—Deferred Maintenance. The operator/program manager's FAA-approved MEL allows the operator to continue a flight or series of flights with certain inoperative equipment. The continued operation must meet the requirements of the MEL deferral classification and the requirements for the equipment loss.

B. Other Deferred Maintenance.

1) Operators/program managers frequently use a system to monitor items that have been inspected and found within serviceable limits. These items are still airworthy, yet warrant repair at a later time or when items no longer meet serviceable limits. This method of deferral may require repetitive inspections to ensure continuing airworthiness of the items. Examples of items that are commonly deferred in this manner are fuel leak classifications, dent limitations, and temporary (airworthy) repairs. Not all fractional ownership programs have this capability. Refer to the program manager's manual for this information.

2) Passenger convenience item (not safety/airworthiness related) deferrals should be handled in accordance with (IAW) the operator/program manager's program.

C. Prompt Repairs. The maintenance program approved for an operator must provide for prompt and orderly repairs of inoperative items. Not all program managers have approved maintenance programs, but the ASI should confirm that inoperative items are repaired promptly.

6-238 CABIN INSPECTION.

A. This inspection should be conducted immediately, when possible, without disturbing the loading and unloading of passengers. The inspection can be performed when some passengers are onboard during through-flights, but ASIs must exercise good judgment by inspecting areas away from the passengers.

B. Bring any discrepancy to the attention of the flightcrew or appropriate maintenance personnel immediately.

6-239 CARGO/PAX COMBINATION CONFIGURED AIRCRAFT.

A. Structural Damage. Inspection results have disclosed instances of significant aircraft structural damage resulting from careless loading of cargo, such as:

- Torn or punctured liners, indicating hidden damage to circumferential stringers, fuselage skin, and bulkheads;
- Damaged rollers, ball mats, etc., causing significant structural damage to the floors; and
- Corrosion and structural damage caused by improper handling of some hazardous materials.
- Observation of hazardous material handling is normally not a surveillance function of the ASI during a ramp inspection. However, if discrepancies are noted during the ramp inspection, the ASI should contact the appropriate TSA office. Additional guidance for cargo configured aircraft is in Volume 6, Chapter 2, Section 5, Conduct Ramp Inspection on Cargo Loading.

B. Cargo Containers, Pallets, and Netting. As part of their normal surveillance, principal inspectors (PI) should ensure that adequate procedures are in place in the operator's manual to ensure that cargo restraint equipment conform to proper standards and are in condition to perform their intended function.

1) If maintenance is required on any of the type certificate (TC) or supplemental type certificate (STC) cargo containers or restraint devices, it must be accomplished IAW appropriate regulations.

2) Geographic inspectors performing air carrier surveillance should follow handbook guidance and report discrepancies in cargo handling/restraint devices through PTRS for follow-up action by the PI.

6-240 RAMP INSPECTION AREAS. There are five general inspection areas that can be observed and evaluated during ramp inspections. These inspection areas are as follows:

- Crewmember,
- Line station operations,
- Aircraft,
- Servicing and maintenance, and
- Ramp and gate condition and activity.

A. The “crewmember” inspection area refers to the evaluation of crewmember preparation for flight and compliance with postflight procedures. This area includes evaluations of crewmember manuals and any required flight equipment, flightcrew flight planning, flightcrew airman and medical certificates, crewmember disposition of trip paperwork, and other items that relate to crewmember responsibilities.

B. The “line station operations” inspection area refers to the various methods and procedures used by the operator to support the flight, such as distribution of dispatch, flight release, and flight-locating paperwork; distribution of weather reports, PIREPs and other flight planning material; passenger handling; boarding procedures; an carry-on baggage screening.

C. The “aircraft” inspection area refers to the aircraft’s general airworthiness, logbook entries, MEL compliance, carryovers, and required items of emergency and cabin safety equipment.

D. The “servicing and maintenance” inspection area applies to any ongoing maintenance and servicing, such as fueling, deicing, or catering. This area is usually evaluated in detail by airworthiness inspectors when performing their ramp inspections. Operations inspectors should, however, observe this area and comment on obvious deficiencies for airworthiness inspector follow-up.

E. The “ramp and gate condition and activity” inspection area refers to taxi and marshalling operations, ramp or parking area surfaces, any apparent contamination or debris, vehicle operations, and the condition and use of support equipment.

6-241 GENERAL RAMP INSPECTION PRACTICES AND PROCEDURES.

A. Ramp inspections may be conducted before a particular flight, at en route stops, or at the termination of a flight. A ramp inspection may be conducted any time an aircraft is at a gate or a fixed ramp location, provided the inspection is conducted when the crew and ground

personnel are performing the necessary preparations for a flight or when they are performing postflight tasks and procedures.

B. The operator does not have to be given advance notice that a ramp inspection is going to be conducted. Inspectors must, however, conduct inspections in a manner that does not unnecessarily delay crewmembers and/or ground personnel in the performance of their duties. The following areas of conduct should be observed by inspectors during ramp inspection activities:

- 1) Inspectors should not interrupt crew or ground personnel when they are performing a particular phase of their duties.
- 2) When inspection activities require inspectors to interact directly with the crew or ground personnel, the activities should be timed to be accomplished when the crew or ground personnel are waiting to begin another phase of their duties or after they have completed one phase of their duties and before they begin another phase.
- 3) Inspection activities must be timed so that they do not delay or interfere with passenger enplaning or deplaning.
- 4) Inspection activities should not adversely impede aircraft servicing or catering.

C. Because of the wide range of inspection areas involved, ramp inspections are usually limited in scope. There are many preparatory or postflight actions that occur simultaneously and one inspector cannot physically observe all of these actions for a particular flight. As a result, the inspector should vary the areas of emphasis for an inspection. For example, on one ramp inspection the inspector may decide to observe and evaluate the PIC accomplishing flight planning and the operator's methods for providing the flightcrew with appropriate flight planning support. On another ramp inspection, the inspector may decide to observe the SIC accomplish the aircraft exterior preflight and then evaluate the aircraft's interior equipment and furnishings. As an example of a ramp inspection conducted at the termination of a flight, the inspector may decide to inspect the aircraft's interior equipment, furnishings, and aircraft logbooks, and then evaluate the trip paperwork turned in by the crew. In this example, the inspector may not have an opportunity to interact directly with the crew; therefore, the "crewmember" inspection area would not be accomplished. Inspectors should vary both the sequence and the emphasis of the inspection areas during a ramp inspection. Inspectors should describe in their reports how the inspection was limited in scope.

D. Inspectors should use the Air Carrier Ramp Inspection Job Aid (Figure 6-17) when conducting ramp inspections. This job aid contains a listing of items ("reminders") that should be observed and evaluated by the inspector during the inspection. The job aid also includes applicable PTRS comment codes to facilitate the writing of the inspection report. There may be items evaluated during a ramp inspection that are not listed on the job aid. In such cases, the PTRS comment code entitled "other" should be used for the appropriate inspection area. The job aid can be used to help describe how the inspection was limited in scope. The job aid can also be used to make notes during the inspection which can be transcribed later to the PTRS Data Sheet.

6-242 SPECIFIC RAMP INSPECTION PRACTICES AND PROCEDURES.

A. Crewmember Inspection Area. When an inspector makes direct contact with a crewmember, the inspector should provide an official but courteous introduction, offer appropriate identification for the crewmember to inspect, and inform the crewmember that a ramp inspection is being conducted. If the direct contact is with a flight crewmember, the inspector should request to see the crewmember's airman and medical certificates. The inspector should review the certificates to see that they meet the appropriate requirements for both the duty position and for the aircraft for the flight to be conducted or that was just terminated. When the direct contact is with flight crewmembers or flight attendants, the inspector should also request to examine the crewmember's professional equipment. Crewmember professional equipment includes any equipment that crewmembers are required to have according to regulation or operator policies, either on their person or that which will be available during the flight. Examples of professional equipment include aeronautical charts, appropriate operator manuals, and operable flashlights. Inspectors should determine whether the charts and manuals carried by crewmembers are current. The following is a list of other items and activities that, depending on the scope of the ramp inspection, should be observed and evaluated:

- Flightcrew flight-planning activities, such as review of weather, flight plans, anticipated takeoff weight and performance data, flight control requirements (dispatch, flight release, flight-locating, ATC flight plans);
- Flightcrew aircraft preflight activities, such as exterior walkaround, logbook reviews, and cockpit setup procedures, including stowage of flightcrew baggage and professional equipment;
- Flight attendant inspection of cabin emergency equipment and cabin setup procedures, including stowage of flight attendant baggage and professional equipment;
- Flightcrew and flight attendant postflight logbook entries and proper use of MELs and placards; and
- Completed trip paperwork and the appropriate disposition of such paperwork.

B. Line Station Operations Area. This area of a ramp inspection usually involves a facility (or designated area of a facility) including related ground personnel, and is commonly referred to as "line station operations." Line station operations include a designated location where crewmembers go to review and pick up required flight paperwork or to deposit flight reports, to send or receive communications with the operator's flight control system, and to join up with other crewmembers assigned to the flight. Line station operations also include gates and ramp areas where passengers and cargo are enplaned and deplaned. The following is a list of items and activities that, depending on the scope of the inspection, should be observed and evaluated in this inspection area:

- Preflight and postflight trip paperwork, such as load manifests, flight plans, weather reports and forecasts, NOTAMs, dispatch or flight release messages and operator bulletins;
- Methods used by the operator to comply with MEL and CDL requirements, particularly the preflight information provided to the crew;

- Adequacy of facility with respect to crewmember and ground personnel use for completing preflight and postflight responsibilities, including work areas and administrative support (such as forms, charts, and copy machines when required by company procedures);
- Usability and currency of operator manuals and aircraft performance information maintained at the line station operations area for crew and ground personnel use
- Company communication capabilities and procedures;
- Passenger enplaning and deplaning including public protection procedures and carry-on baggage screening; and
- Cargo and baggage loading and stowage procedures and unloading procedures.

C. Aircraft Inspection Area. Ramp inspections must include at least an examination of the aircraft's registration, airworthiness certificate, and maintenance logbook. Inspectors should plan their ramp inspection activities so that any inspection of the aircraft's interior equipment and furnishings would be conducted either before passengers are enplaned or after they are deplaned. The following is a list of items that should be observed in this inspection area:

- Aircraft registration and airworthiness certificates;
- Aircraft and cabin logbooks (or equivalent) (open discrepancies, carryover items, and cabin equipment items needing repair or replacement);
- Appropriate placarding;
- Fire extinguishers (correct types, numbers and locations; properly serviced, safetied, tagged, and stowed);
- Portable oxygen bottles (correct numbers and locations; properly serviced, tagged, and stowed; condition of mask, tubing, and connectors);
- Protective breathing equipment (properly located, stowed, and sealed);
- First aid kits and emergency medical kits (correct numbers and locations; properly sealed, tagged, and stowed);
- Megaphones (correct numbers and locations; in operable condition, and properly stowed);
- Crash ax (properly located and stowed);
- Passenger briefing cards (one at each seat position; appropriate to aircraft; required information including emergency exit operation, slides, oxygen use, seatbelt use, brace positions, flotation devices; appropriate pictorials for extended overwater operations, including ditching exits, life preserver, and life or slide raft inflight location);
- Passenger seats (not blocking emergency exits; TSO label on flotation cushions; cushion intact; latching mechanism on tray tables; armrests have self-contained and removable ashtrays; seatbelts properly installed, operational, and not frayed or twisted);
- Passenger oxygen service units (closed and latched with no extended red service indicators or pins);
- Flight attendant stations (operable seat retraction and restraint systems; properly secured; harnesses not frayed or twisted; seat cushions intact; headrests in correct position; PA system and interphone);

- Galleys (latching mechanisms - primary and secondary; tiedowns; condition of restraints; padding; proper fit of cover and lining of trash receptacles; hot liquid restraint systems; accessibility and identification of circuit breakers and water shut-off valves; non-skid floor; girt bar corroded or blocked by debris; clean stationary cart tiedowns (mushrooms); galley carts in good condition and properly stowed; lower lobe galley emergency cabin floor exits passable and not blocked by carpeting, if applicable);
- Galley personnel lift, if applicable (no movement up or down with doors open; safety interlock system; proper operation of activation switches);
- Lavatories (smoke alarms; no-smoking placards; ashtrays; proper fit of cover and lining of trash receptacles; automatic fire extinguisher systems);
- Stowage compartments (weight restriction placards; restraints and latching mechanisms; compliance with stowage requirements; accessibility to emergency equipment; carry-on baggage provisions);
- Required placards and signs (seatbelt, flotation equipment placards at seats; emergency/safety equipment placards; weight restriction placards; no-smoking/seatbelt signs; no-smoking placards; exit signs and placards, including door opening instructions);
- Emergency lighting system (operation independent of main system; floor proximity escape path system; controllability from cockpit);
- Exits (general condition; door seals; girt bars and brackets; handle mechanisms; signs; placards; slide or slide raft connections and pressure indications; lights and switches); and
- Main landing gear viewing ports, if applicable (cleanliness and usability).

D. Servicing and Maintenance Inspection Area. The servicing and maintenance of the aircraft may be observed at any time during the ramp inspection. The following is a list of some areas that may be observed and evaluated in this inspection area:

- Fueling procedures (ground wires in place; fuel slip properly completed; fueler trained in the operator's specific procedures);
- Routine maintenance (qualifications of mechanics, repairmen or service agents; appropriate logbook entries);
- Deicing procedures (compliance with company procedures; proper glycol/water ratios and temperatures; avoidance of engine/APU inlets; removal of all snow and ice; trailing and leading edges free of snow and ice and covered completely with deicing fluid);
- Correct procedures used by service contractors (caterers; cleaners; lavatory and water servicing personnel; correct use of switches and controls); and
- Vehicle operation near aircraft (general condition and proper servicing of vehicles and equipment).

E. Ramp and Gate Condition and Activity Inspection Area. During ramp inspections, inspectors should observe and evaluate the ramp and gate surface condition as well as any support activities being conducted during an inspection. Inspectors should observe vehicular operations on the ramp and around gate areas and other aircraft operations during marshalling,

taxiing, or towing operations. Inspectors should report any condition that appears to be unsafe or could potentially be unsafe. The following is a list of some items that should be observed and evaluated in this inspection area:

- Ramp, apron, and taxiway surfaces (general condition; cracks; holes; uneven surfaces);
- Contamination debris (FOD; fuel, oil, or hydraulic spills; snow and ice accumulations; taxi lines; gate markings; signs; signals);
- Construction (appropriate barriers; signs; markings; flags); and
- Vehicular operations (conducted safely around aircraft and gate areas by qualified personnel).

6-243 PERFORMING THE RAMP INSPECTION.

A. This inspection must be accomplished without interfering with the turnaround of the aircraft. The following list includes some of the activities that could delay the turnaround time if interfered with:

- Boarding and deplaning of passengers,
- Servicing,
- Fueling,
- Maintenance,
- Baggage handling, and
- Any other operator/program manager activity.

B. The ASI must immediately bring any discrepancies noted to the attention of appropriate personnel, to allow the operator/program manager the opportunity to take corrective action without interrupting the flight schedule. The ASI must verify that all corrective actions taken were IAW the requirements of the operator/program manager's maintenance procedures manual.

6-244 RAMP INSPECTION JOB AID. Figure 6-17 is the Air Carrier Ramp Inspection Job Aid, which is available on the district office Job Aid Disk.

6-245 PREREQUISITES AND COORDINATION REQUIREMENTS.

A. Prerequisites.

- Experience working with similar type aircraft; and
- Knowledge of the program manager's operating manual, if applicable.

B. Coordination.

1) This task may require coordination between Maintenance, Avionics, Cabin Safety, and Operations ASIs.

2) Geographic units should coordinate with the CHDO or the IFO.

6-246 REFERENCES, FORMS, AND JOB AIDS.**A. References.**

- Title 14 CFR parts 21, 23, 25, 27, 29, 43, 45, 47, 91; and International Civil Aviation Organization (ICAO) Annexes 6 and 8;
- FAA Order 8340.1, Maintenance Bulletins, as amended; and
- Operator's Maintenance Procedures Manual/program manager's maintenance/operations procedures manual.

B. Forms. FAA Form 110A**C. Job Aids.**

- Figure 6-17, Air Carrier Ramp Inspection Job Aid,
- Figure 6-18, Interior Inspection Guidelines,
- Figure 6-19, Exterior Inspection Guidelines, and
- JTAs: 2.2.4, 2.2.5, 2.3.58.

6-247 PROCEDURES.

A. Begin the Inspection. Begin the ramp inspection IAW the district office work program or other directives.

B. Prepare for the Inspection.

- 1) Coordinate with the operator/program manager's scheduling personnel or crew, select the flight to be inspected, and determine the type of equipment and ground time needed.
- 2) Determine recent problem areas that were identified for that type of aircraft, if any.
- 3) Determine if recent regulatory changes and AD requirements affect the aircraft to be inspected.

C. Conduct the Exterior Inspection, as Applicable. Perform this inspection IAW Figure 6-19.

D. Interview the Flightcrew. Introduce yourself and describe the purpose and scope of the inspection.

E. Inspect the Aircraft Maintenance Records.

- 1) Prior to departure of the aircraft, ensure that all open discrepancies from the previous flight are resolved IAW the operator/program manager's manual.
- 2) Review the maintenance records to determine if repetitive maintenance problems exist, which might indicate a trend.

3) Ensure that all MEL items are deferred IAW the provisions of the operator/program manager's FAA-approved MEL.

a) Review the operator/program manager's FAA-approved MEL to determine if conditions, procedures, and placarding requirements were accomplished to defer specific items correctly.

b) Note the date when an item was first deferred to determine if the maximum allowed length of deferral was exceeded. Accomplish this by examining maintenance record pages, the deferred maintenance list, or deferred maintenance placards or stickers.

4) Ensure that an airworthiness release, maintenance record entry, or appropriate approval for return to service was made after the completion of maintenance.

5) Ensure that the maintenance record contains the following for each discrepancy:

- Description of the work performed or a reference to acceptable data;
- Date of completion of work;
- Name or other positive identification of the person approving the work;
- Name of the person performing work, if outside the organization;
- Signature, certificate number, and kind of certificate, if work has been performed satisfactorily; and
- If emergency maintenance is performed by personnel who are not covered by a drug and alcohol misuse program, ensure that the reporting requirements of part 91, § 91.1047(d) are complied with.

F. Conduct the Interior Inspection, as Applicable. Perform this inspection IAW Figure 6-18.

G. Debrief the Operator/Program Manager, Personnel, or Flightcrew. Inform the flightcrew or appropriate personnel that the inspection has been completed. Discuss the discrepancies brought to the operator/program manager's attention during the inspection.

H. Examine the Maintenance Record Entries. Ensure that the operator/program manager has recorded discrepancies noted during this inspection. If time is available, monitor the operator's corrective actions.

I. Analyze Findings. Analyze each finding to determine if the discrepancies are the result of improper maintenance and/or missing or inadequate maintenance/inspection procedures.

6-248 TASK OUTCOMES.

A. PTRS Completion.

1) The data reporting requirements for completing a part 129 aircraft ramp inspection using surveillance activity codes 3627 and 5627 have been revised. Section IV of the Data Sheet indicates each area that should be examined in the performance of 3627/5627 inspections. Comments are required only for those areas with findings or discrepancies noted

during the inspection. For each discrepancy or finding, enter the appropriate primary area and key word on the Data Sheet. Next, enter either a potential (P) or unsatisfactory (U) for discrepancies and findings. In the PTRS comment field (section IV), enter the line item identification number shown on the Figure Sheet (1.1, 2.6, 3.4, etc.) and then enter a description of the discrepancy. If a positive comment is needed in a particular area for clarification, enter it using the appropriate primary area and key word shown on the PTRS form, using the information (I) opinion code. Only positive comments or comments provided for clarification purposes may use the I opinion code. All findings and discrepancies must use either the P or U opinion code.

2) All other ramp inspections should be entered into PTRS IAW the PTRS procedure manual (PPM).

B. Task Completion. Completion of this task can result in the following:

- Appropriate enforcement action when analysis of the findings disclose improper maintenance
- Written notification to the operator/program manager of the necessary changes to the manual, when analysis of the findings discloses missing or inadequate maintenance/inspection procedures
- Communication with the CHDO/IFO by the geographic unit finding discrepancies

6-249 FUTURE ACTIVITIES. Based on inspection findings, determine if closer surveillance, additional enforcement, other job tasks, and/or additional coordination between the CHDO/IFO and geographic units are required to regain compliance.

Figure 6-17, Air Carrier Ramp Inspection Job Aid

PTRS ACTIVITY: 1622 DATE:		AIR CARRIER	FLT NO.	A/C REG NO.		MAKE	MOD/SERIES
PIC NAME:		CERT #	BASE	FROM	TO	RESULTS	HB REF VI.2.2.
U = UNACCEPTABLE; P = POTENTIAL; I = INFORMATION; E = EXCEEDS							
CREWMEMBERS		COMPANY DIRECTIVES		631	F/A STATION		825
KNOWLEDGE	101	* MEL Procedures	607		* Retracts	--	
QUAL/CURRENCY	105	* Adequacy of Facility	501		* Condition	--	
CERT/RATINGS	109	* Ground Comm	753		* P/A & Interphone	--	
MANUAL AVAILABILITY	209	* Flight Comm	751		GALLEYS	825	
MANUAL CURRENCY	103	* Gate Agent Procedures	--		* Latch Mechanisms	--	
REQ. EQUIPMENT	--	* Pax Handling	637		* Restraints/Tie-downs/Covers	--	
CREW COMPLEMENT	601	* Protection of The Public	635		* Debris/Corrosion	--	
PREFLIGHT	721	* Cargo/ Baggage Loading/Stowage	767		LAVATORIES	825	
* Flight Plan	763	* Security	619		* Smoke Alarm	--	
* Weather Review	757	Other Remarks	733		* Signs/Lights	--	
* NOTAMS	759	AIRCRAFT/EQUIPMENT			* Extinguisher	--	
* Fuel Reqmts	--	REQ. CERT/PLACARDS	809		STOWAGE AREAS	825	
* T/O Data	--	LOGBOOKS	804		* Latch Mechanisms	--	
* Disp/Flt Rel	767	* Open Items	--		* Access to Equip.	--	
* A/C Preflight	--	* Carryovers	--		EMERGENCY LIGHTING	833	
* Logbook Review	--	* Cabin Items	--		* Operable	--	
* Cockpit Setup	--	MEGAPHONES	825		* Floor Systems	--	
* Crew Baggage	--	FIRE EXTINGUISHERS	826		EXITS	852	
* F/A Inspection Of Cabin Equip.	--	* Correct Type	--		* Control/Seals	--	
* Cabin Setup	--	* Number	--		* Girt Bar and Brackets	--	
* Pax Boarding	637	* Serviced	--		* Signs/Symbols	--	
* Carry-on Baggage	627	* Location	--		* Rafts/Lanyards	--	
* Handicapped Pax	--	PORT. O2 BOTTLES	835		MLG VIEWING PORTS	--	
* Pushback/Pwrback	--	* Number	--		OTHER REMARKS	889	
POSTFLIGHT	--	* Masks/Hoses	--		SERVICING AND MAINTENANCE		
* Coordination With Ground Crew	--	PBE	835		FUELING	808	
* MEL's/CDL's	607	* Properly Stowed	--		ROUTINE MAINT.	813	
* Placards	--	* Sealed	--		DEICING	812	
* Trip Papers	--	PAX BRIEFING CARDS	825		CONTRACT SERVICES	--	
* Fuel Remaining	--	* At Each Seat	--		GROUND SVC EQUIP.	816	
* Post Flight Log Book Entries	--	* Req. Info.	--		RAMP/GATE CONDS & ACTIVITY		
* F/A Remaining On Board With PAX	--	PAX SEATS	825		CONDS OF RAMP OR GATE AREAS	515	
Other Remarks	199	* Emergency Exits	--		DEBRIS OR SPILLS	523	
LINE STATION OPERATIONS		* Condition	--		CONSTRUCTION	521	
TRIP PAPERS	--	* Ash Trays	--		OBSTRUCTIONS	519	
* Load Manifests	613	* Seatbelts/Trays	--		VEHICLE OPS	517	
* Flight Plans	763	PAX O2 SVC UNIT	835		MARKINGS	525	
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Figure 6-18, Interior Inspection Guidelines

- A. Examine airworthiness and registration certificates. Ensure the following:
- 1) Airworthiness and registration certificates are current and valid
 - 2) Both certificates contain the same model, serial, and registration numbers
 - 3) Temporary registration is current
 - 4) Signatures are in permanent type ink

- B. Flight deck inspection. Inspect the following:**
- 1) Instrument security and range markings
 - 2) Windows (delamination, scratches, crazing, and general visibility)
 - 3) Emergency equipment
 - 4) Medical kit (if located on flight deck)
 - 5) Seat belts and shoulder harnesses (Technical Standard Order marking, metal to metal latching, and general condition)
 - 6) Check the following if using cockpit jump seat:
 - a) Jump seat oxygen system. Turn regulator on and select 100% oxygen.
 - b) Interphone system. Select Comm 1 and Comm 2 to ensure systems are working.
 - 7) When the most forward jump seat is in the cabin, coordinate with the crew for connecting the headset and adapter cables.
 - 8) Ensure that the jump seat is serviceable and that seat belt and shoulder harnesses are available.
- C. Inspect cabin to include the following:**
- 1) Lavatory. Ensure the following:
 - a) Fire extinguisher system is installed in sealed trash containers,
 - b) Smoke detection system is installed,
 - c) Trash containers are sealed according to applicable Airworthiness Directive(s),
 - d) No Smoking” placards are posted, and
 - e) Ashtrays are available outside the lavatory.
 - 2) Flight attendant seats.
 - a) Pull the jump seat down to ensure seat retracts (those in path of exits)
 - b) Inspect seat belts for Technical Standard Order marking, metal to metal latching and general condition
 - 3) Cabin emergency equipment. All equipment requiring periodic inspections should have an inspection date marked on it. Inspect the following:
 - a) Flight attendant flashlight holder;
 - b) Slide containers to ensure containers are properly marked for content. Check pressure of slide inflation bottle, if visible;
 - c) Medical kit (if not checked on flight deck);
 - d) First aid kit;
 - e) Emergency oxygen (proper pressure and security);
 - f) Megaphone(s) (security and general condition);
 - g) Fire extinguishers (security, pressure, and seal);
 - h) Life raft storage markings (if raft is required);
 - i) Emergency briefing cards (random sample);
 - j) General condition of emergency floor path lighting system;
 - k) Placement of all “Emergency Exit” signs;
 - l) Presence and legibility of “Emergency Exit” operation instructions;
 - m) Placarding for location of all emergency equipment; and
 - n) Life preservers (vests).
 - 4) Passenger seats. Ensure the following:
 - a) Seats adjacent to emergency exits do not block exit path;

- b) Seats are secure in seat track (random sample);
- c) Seat breakover pressure is in accordance with operator's maintenance program (random sample);
- d) "Fasten Seat Belt During Flight" placards are in view from all seats; and
- e) Seat belts have metal-to-metal latches and are in good general condition (random sample).
- 5) Galleys/service centers. Inspect the following:
 - a) Trash bin lids for fit,
 - b) Storage compartment restraints,
 - c) Stationary cart tie-downs,
 - d) Lower lobe equipment/restraints,
 - e) Lift operation, and
 - f) Galley supply stowage.
- 6) Overhead baggage compartments. Check for weight restriction placards and the doors for proper latching, when applicable.
- D. Inspect cargo compartment.**
 - 1) Ensure the following:
 - a) Cargo compartment fire protection is appropriate for its classification;
 - b) Cargo liner is free from tears and/or punctures. If these are noted, inspect structure behind liner for damage (stringers, circumferentials, etc.). Ensure sealing tape is proper type and in good condition;
 - c) Cargo door is free of fluid leaks and structural damage;
 - d) Fuselage door structure and sill is free of damage;
 - e) Smoke detectors are in satisfactory condition;
 - f) Lighting is operable and protective grills are installed;
 - g) Cargo flooring is free from structural or other damage; and
 - h) Pallet positions/compartments are placarded for position identification and weight limitations.
 - 2) Inspect pallet system, if applicable. Ensure the following:
 - a) Ball mats are serviceable, e.g., no broken or missing balls;
 - b) Forward, aft, and side restraints are serviceable; and
 - c) Roller assemblies are secure and have no missing or broken rollers.
 - 3) Ensure the 9G forward restraint net is serviceable, if applicable
 - 4) Ensure that cargo restraints for bulk loaded cargo are adequate, if applicable
 - 5) Inspect cabin mounted equipment
 - 6) Inspect fire extinguishers for inspection due dates and pressure
 - 7) Inspect load manifest for Hazardous Material. If present, determine crew knowledge of the following:
 - a) Location and labeling of hazardous materials;
 - b) Special requirements, if required; and
 - c) If proper paperwork is on board.
 - 8) Ensure captain is aware of the following responsibilities:
 - a) Inspection of cargo to ensure proper load distribution;
 - b) Ensuring loads do not exceed compartment or position limits; and
 - c) Ensuring loads are being properly restrained.

Figure 6-19, Exterior Inspection Guidelines

- A.** Accompany a flight crewmember during the exterior inspection, if possible, and inspect the following, as applicable:
- 1) Landing gear and wheel well areas. Check for the following:
 - a) Any indication of wear, chafing lines, chafing wires, cracks, dents, or other damage;
 - b) Structural integrity of gear and doors (cracks, dents, or other damage);
 - c) Hydraulic leaks (gear struts, actuators, steering valves, etc.);
 - d) Tire condition;
 - e) Tire pressure (if pressure indicators are installed);
 - f) Wheel installation and safety locking devices;
 - g) Wear, line security, leaks, and installation of brakes; and
 - h) Corrosion.
 - 2) Fuselage and pylons. Inspect the following:
 - a) Structure for cracks, corrosion, dents, or other damage;
 - b) Fasteners (loose, improper, missing);
 - c) Condition of radome;
 - d) Condition of pitot tubes;
 - e) Static ports (cleanliness and obstructions);
 - f) Stall warning devices and other sensors;
 - g) Antennas (security and indications of corrosion);
 - h) Stains or other indications of leaks;
 - i) Lavatory servicing areas (evidence of fresh blue water streaks);
 - j) Cargo compartments for integrity of fire-protective liners (no holes or unapproved tape used for repairs);
 - k) Emergency exit identification/markings;
 - l) Registration marking (legibility); and
 - m) All lights (general condition, broken lenses, etc.).
 - 3) Wings and pylons. Inspect the following:
 - a) Structure for cracks, corrosion, dents, or other damage;
 - b) Leading edge (dents and/or damage in line with engine inlets);
 - c) Leading edge devices (when open, actuator leaks, general condition of lines, wires, and plumbing);
 - d) Evidence of fuel leaks (operator must prove leak is within established limits);
 - e) All lights (general condition, broken lenses, etc.);
 - f) Flaps (cracks, corrosion, dents, and delamination);
 - g) Flap wells (general condition of lines, wires, and plumbing);
 - h) Static eliminators (number missing);
 - i) Ailerons and aileron tabs (cracks, corrosion, dents, delamination); and
 - j) Missing, loose, or improperly secured access door/inspection panels and blowout panels.
 - 4) Engines. Inspect the following:
 - a) Intake for fan blade damage and oil leaks;
 - b) Ring cowl for missing or loose fasteners;
 - c) Cowling doors for security and proper fit;
 - d) Lower cowling for evidence of fluid leaks;

- e) Exhaust for turbine and tailpipe damage and evidence of fluids;
- f) Reverser doors for stowage and security, and evidence of leaks; and
- g) Access doors for security.
- 5) Propellers. Inspect the following:
 - a) Leading edge of propeller for cracks, dents, and other damage;
 - b) Deicer boots for signs of deterioration and security; and
 - c) Spinners for security, cracks, and evidence of fluid leaks.
- 6) Empennage. Inspect the following:
 - a) Leading edge for dents;
 - b) All lights (general condition, broken lenses, etc.);
 - c) Missing static discharge eliminators;
 - d) Elevator, rudder, and tabs (cracks, corrosion, dents, and delamination); and
 - e) Evidence of elevator and rudder power unit hydraulic leaks.
- 7) Ground safety. Inspect the following:
 - a) Positioning of support vehicles
 - b) Fueling of aircraft to include the following:
 - 1. Refueling pressure,
 - 2. Condition of refueling unit (leaks, filter change dates, exhaust system, etc.),
 - 3. Grounding,
 - 4. Fire protection, and
 - 5. General fueling procedures.
 - c) General condition of ramp to include the following:
 - 1. Provisions for grounding,
 - 2. Foreign objects on ramp,
 - 3. Fuel spills,
 - 4. General housekeeping/cleanliness,
 - 5. Passenger control, and
 - 6. Fire protection.
- 8) Baggage. Observe loading and unloading of baggage compartments to include the following:
 - a) Baggage restraining system, and
 - b) Load distribution.

RESERVED. Paragraphs 6-250 through 6-264.